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## Amendments To The Claims:

Claims 1-32 (Cancelled).

- 33. (Currently amended) A method of forming a catheter balloon, comprising:
- a) providing a balloon formed of a material having a proximal end, a distal end, an expandable section, a proximal shaft section between the proximal end and the expandable section, a distal shaft section between the expandable section and the distal end, and an outer surface;
- b) placing the balloon on a mandrel having a longitudinal axis and rotating the mandrel around the mandrel longitudinal axis to rotate the balloon thereon; and
- c) positioning a material removal device in contact with an outer surface of at least a section of the rotating balloon to thereby remove balloon material from a portion of at least one of the proximal shaft section and the distal shaft section to form a shaft section having a first portion with a substantially uniform first diameter and a second portion with a substantially uniform second diameter, different than the first diameter.
- 34. (Previously Presented) The method of claim 33 further comprising:

causing relative longitudinal displacement between the balloon and the material removal device to remove balloon material from a length of the proximal shaft section.

35. (Previously Presented) The method of claim 33 further comprising:

causing relative longitudinal displacement between the balloon and the material removal device to remove balloon material from a length of the distal shaft section.

- 36. (Previously Presented) The method of claim 33 wherein the material removal device is a rotating disk having an abrasive surface with a first grain value and a step comprises abrasively removing the material.
- 37. (Currently amended) The method of claim 33 wherein the material removal device comprises at least one rotating grinding wheel and a step comprises grinding the at least one section of the rotating <u>balloon</u> tube to remove the material.
- 38. (Withdrawn) The method of claim 33 wherein the material removal device is a chemical solvent and (c) comprises causing a chemical reaction in an outer surface of the balloon material to remove the balloon material.
- 39. (Previously Presented) The method of claim 33 further comprising after (c) cleaning the

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balloon of all material deposits resulting from the material removal.

- 40. (Previously Presented) The method of claim 33 wherein the shaft section comprises a tapered transition between the first diameter portion and the second diameter portion of the shaft section.
- 41. (Previously Presented) The method of claim 40 including forming two or more tapered transitions.
- 42-48. (Cancelled)
- 49. (New) The method of claim 33, further comprising rotating the mandrel around the mandrel longitudinal axis to rotate the balloon thereon.